CLAIMS

1. A vaporizer for vaporizing a liquefied gas supplied by a source of liquefied gas, the vaporizer comprising:

a heat exchanger having an inlet structured to accept liquefied gas, a heater to boil and superheat the accepted liquefied gas to a gas vapor, and an outlet structured to release the gas vapor; and

a capacity control valve having:

a valve body with a thermal expansion chamber, a liquefied gas inlet chamber and a liquefied gas outlet chamber,

a diaphragm within the valve body dividing the thermal expansion chamber from the liquefied gas inlet chamber, the diaphragm being movable in response to a pressure imbalance in the thermal expansion chamber and the liquefied gas inlet chamber,

a temperature sensing member positioned to sense the temperature of the released gas vapor from the heat exchanger outlet and having an expansion fluid therein in fluid communication with the thermal expansion chamber,

a valve inlet in fluid communication with the liquefied gas inlet chamber and structured to be coupled to and accept the liquefied gas supplied by the source of liquefied gas,

a valve outlet in fluid communication with the liquefied gas outlet chamber and connected to the heat exchanger inlet, and

a valve positioned between the liquefied gas inlet chamber and the liquefied gas outlet chamber, the valve being movable toward a closed configuration to reduce the flow of liquefied gas from the liquefied gas inlet chamber to the liquefied gas outlet chamber and toward an open configuration to increase the flow of liquefied gas from the liquefied gas inlet chamber to the liquefied gas outlet chamber, the valve being moved toward the closed and open configurations in response to movements of the diaphragm resulting from the differential

pressure in the thermal expansion chamber and the liquefied gas inlet chamber, with the pressure in the thermal expansion chamber being dependent on the sensed temperature of the released gas vapor from the heat exchanger outlet and the pressure in the liquefied gas inlet chamber being dependent on the pressure of the liquefied gas supplied by the source of liquefied gas.

2. The vaporizer of claim 1, wherein the valve is movable fully to the closed configuration and to the open configuration.

3. The vaporizer of claim 1 wherein the temperature sensing member is a sensing bulb thermally coupled to the heat exchanger outlet and the expansion fluid is communicated to the thermal expansion chamber by a tube in fluid communication with the thermal expansion chamber.

4. The vaporizer of claim 1 wherein the expansion fluid is selected to have saturation properties similar to saturation properties of the liquefied gas supplied by the source of liquefied gas.

5. The vaporizer of claim 1 wherein the capacity control valve further includes an auxiliary pressure device producing a biasing pressure on the valve to bias the valve toward the closed configuration.

6. The vaporizer of claim 5 wherein the auxiliary pressure device has an adjustment member to adjustably select the biasing pressure produced by the auxiliary pressure device.

7. The vaporizer of claim 1 wherein the diaphragm and the valve are connected together such that movement of the diaphragm toward the thermal expansion chamber moves the valve toward the closed configuration and movement of the diaphragm toward the liquefied gas inlet chamber moves the valve toward the open configuration.

8. A vaporizer for vaporizing a liquefied gas supplied by a source of liquefied gas, the vaporizer comprising:

a heat exchanger having an inlet structured to accept liquefied gas, a heater to boil and superheat the accepted liquefied gas and thereby produce a gas vapor, and an outlet structured to release the gas vapor; and

a capacity control valve having:

a thermal expansion chamber, a liquefied gas inlet chamber and a liquefied gas outlet chamber,

a pressure sensor configured to sense the differential pressure in the thermal expansion chamber and the liquefied gas inlet chamber,

a temperature sensor configured to sense the temperature of the gas vapor produced by the heat exchanger and to produce a sensed temperature pressure in the thermal expansion chamber in response to the sensed temperature,

a valve inlet in fluid communication with the liquefied gas inlet chamber and structured to be coupled to and accept the liquefied gas supplied by the source of liquefied gas,

a valve outlet in fluid communication with the liquefied gas outlet chamber and connected to the heat exchanger inlet, and

a valve positioned between the liquefied gas inlet chamber and the liquefied gas outlet chamber, the valve being movable toward a closed configuration to reduce the flow of liquefied gas from the liquefied gas inlet chamber to the liquefied gas outlet chamber and toward an open configuration to increase the flow of liquefied gas from the liquefied gas inlet chamber to the liquefied gas outlet chamber, the valve being moved toward the closed and open configurations in response to the pressure sensor sensing the differential pressure in the thermal expansion chamber and the liquefied gas inlet chamber, with the pressure in the thermal expansion chamber being dependent on the sensed temperature of the gas vapor produced by the heat exchanger and the pressure in the liquefied gas inlet chamber being dependent on the pressure of the liquefied gas supplied by the source of liquefied gas.

9. The vaporizer of claim 8, wherein the valve is movable fully to the closed configuration and to the open configuration.

10. The vaporizer of claim 8 wherein the temperature sensor is thermally coupled to the heat exchanger outlet.

11. The vaporizer of claim 8 wherein the temperature sensor includes an expansion fluid in fluid communication with the thermal expansion chamber, the expansion fluid being selected to expand and contract with the changes in temperature of the gas vapor produced by the heat exchanger.

12. The vaporizer of claim 11 wherein the expansion fluid is selected to have saturation properties similar to saturation properties of the liquefied gas supplied by the source of liquefied gas.

13. The vaporizer of claim 8 wherein the capacity control valve further includes an auxiliary pressure device producing a biasing pressure on the valve to bias the valve toward the closed configuration.

14. The vaporizer of claim 13 wherein the auxiliary pressure device has an adjustment member to adjustably select the biasing pressure produced by the auxiliary pressure device.

15. The vaporizer of claim 8 wherein the pressure sensor moves the valve toward the open configuration in response to the pressure sensor sensing the differential pressure one of increasing and decreasing, and moves the valve toward the closed configuration in response to the pressure sensor sensing the differential pressure the other of increasing and decreasing.

16. A vaporizer for vaporizing a liquefied gas supplied by a source of liquefied gas and useable with a heater to supply heat to the vaporizer, the vaporizer comprising:

a heat exchanger having an inlet structured to accept liquefied gas, a heat exchanger portion to boil and superheat the accepted liquefied gas using the heat supplied by the heater and thereby produce a gas vapor, and an outlet structured to release the gas vapor; and

a capacity control valve having:

a temperature sensor configured to sense the temperature of the gas vapor produced by the heat exchanger and to produce a sensed temperature pressure in response to the sensed temperature,

a pressure sensor configured to sense the difference in the sensed temperature pressure and a pressure of the liquefied gas supplied by the source of liquefied gas,

a valve inlet structured to be coupled to and accept the liquefied gas supplied by the source of liquefied gas,

a valve outlet connected to the heat exchanger inlet, and

a valve regulating the flow of liquefied gas between the valve inlet and the valve outlet, the valve being movable toward a closed configuration to reduce the flow of liquefied gas between the valve inlet and the valve outlet and toward an open configuration to increase the flow of liquefied gas between the valve inlet and the valve outlet, the valve being moved toward the closed and open configurations in response to the pressure sensor sensing the difference in the sensed temperature pressure and the pressure of the liquefied gas supplied by the source of liquefied gas.

17. The vaporizer of claim 16, wherein the valve is movable fully to the closed configuration and to the open configuration.

18. The vaporizer of claim 16 wherein the temperature sensor is thermally coupled to the heat exchanger outlet.

19. The vaporizer of claim 16 wherein the capacity control valve further includes an auxiliary pressure device producing a biasing pressure on the valve to bias the valve toward the closed configuration.

20. The vaporizer of claim 19 wherein the auxiliary pressure device has an adjustment member to adjustably select the biasing pressure produced by the auxiliary pressure device.

21. The vaporizer of claim 16 wherein the pressure sensor moves the valve toward the open configuration in response to the pressure sensor sensing the difference in the sensed temperature pressure and a pressure of the liquefied gas supplied by the source of liquefied gas being one of increasing and decreasing, and moves the valve toward the closed configuration in response to the pressure sensor sensing the difference in the sensed temperature pressure and a pressure of the liquefied gas supplied by the source of liquefied gas being the other of increasing and decreasing.

22. A vaporizer for vaporizing a liquefied petroleum gas supplied by a source of liquefied petroleum gas, the vaporizer comprising:

a heat exchanger having an inlet structured to accept liquefied petroleum gas, a heater to boil and superheat the accepted liquefied petroleum gas to a petroleum gas vapor, and an outlet structured to release the petroleum gas vapor; and

a capacity control valve having:

a valve body with a thermal expansion chamber, a liquefied petroleum gas inlet chamber and a liquefied petroleum gas outlet chamber,

a diaphragm within the valve body dividing the thermal expansion chamber from the liquefied petroleum gas inlet chamber, the diaphragm being movable in response to a pressure imbalance in the thermal expansion chamber and the liquefied petroleum gas inlet chamber,

a temperature sensing member positioned to sense the temperature of the released petroleum gas vapor from the heat exchanger outlet and having an expansion fluid therein in fluid communication with the thermal expansion chamber,

a valve inlet in fluid communication with the liquefied petroleum gas inlet chamber and structured to be coupled to and accept the liquefied petroleum gas supplied by the source of liquefied petroleum gas,

a valve outlet in fluid communication with the liquefied petroleum gas outlet chamber and connected to the heat exchanger inlet, and

a valve positioned between the liquefied petroleum gas inlet chamber and the liquefied petroleum gas outlet chamber, the valve being movable toward a closed configuration to reduce the flow of liquefied petroleum gas from the liquefied petroleum gas inlet chamber to the liquefied petroleum gas outlet chamber and toward an open configuration to increase the flow of liquefied petroleum gas from the liquefied gas inlet chamber to the liquefied petroleum gas outlet chamber, the valve being moved toward the closed and open configurations in response to movements of the diaphragm resulting from the differential pressure in the thermal expansion chamber and the liquefied petroleum gas inlet chamber, with the pressure in the thermal expansion chamber being dependent on the sensed temperature of the released petroleum gas vapor from the heat exchanger outlet and the pressure in the liquefied petroleum gas inlet chamber being dependent on the pressure of the liquefied petroleum gas supplied by the source of liquefied petroleum gas.

23. The vaporizer of claim 22, wherein the valve is movable fully to the closed configuration and to the open configuration.

24. The vaporizer of claim 22 wherein the temperature sensing member is a sensing bulb thermally coupled to the heat exchanger outlet and the expansion fluid is communicated to the thermal expansion chamber by a tube in fluid communication with the thermal expansion chamber.

25. The vaporizer of claim 22 wherein the expansion fluid is selected to have saturation properties similar to saturation properties of the liquefied petroleum gas supplied by the source of liquefied petroleum gas.

26. The vaporizer of claim 22 wherein the capacity control valve further includes an auxiliary pressure device producing a biasing pressure on the valve to bias the valve toward the closed configuration.

27. The vaporizer of claim 26 wherein the auxiliary pressure device has an adjustment member to adjustably select the biasing pressure produced by the auxiliary pressure device.

28. The vaporizer of claim 22 wherein the diaphragm and the valve are connected together such that movement of the diaphragm toward the thermal expansion chamber moves the valve toward the closed configuration and movement of the diaphragm toward the liquefied petroleum gas inlet chamber moves the valve toward the open configuration.

29. A vaporizer for vaporizing a liquefied petroleum gas supplied by a source of liquefied petroleum gas, the vaporizer comprising:

a heat exchanger having an inlet structured to accept liquefied petroleum gas, a heater to boil and superheat the accepted liquefied petroleum gas and thereby produce a petroleum gas vapor, and an outlet structured to release the petroleum gas vapor; and

a capacity control valve having:

a temperature sensor configured to sense the temperature of the petroleum gas vapor produced by the heat exchanger and to produce a sensed temperature pressure in response to the sensed temperature,

a pressure sensor configured to sense the difference in the sensed temperature pressure and a pressure of the liquefied petroleum gas supplied by the source of liquefied petroleum gas,

a valve inlet structured to be coupled to and accept the liquefied petroleum gas supplied by the source of liquefied petroleum gas,

a valve outlet connected to the heat exchanger inlet, and

a valve regulating the flow of liquefied petroleum gas between the valve inlet and the valve outlet, the valve being movable toward a closed configuration to reduce the flow of liquefied petroleum gas between the valve inlet and the valve outlet and toward an open configuration to increase the flow of liquefied petroleum gas between the valve inlet and the valve outlet, the valve being moved toward the closed and open configurations in response to the pressure sensor sensing the difference in the sensed temperature pressure and the pressure of the liquefied petroleum gas supplied by the source of liquefied petroleum gas.

30. The vaporizer of claim 29, wherein the valve is movable fully to the closed configuration and to the open configuration.

31. The vaporizer of claim 29 wherein the temperature sensor is thermally coupled to the heat exchanger outlet.

32. The vaporizer of claim 29 wherein the capacity control valve further includes an auxiliary pressure device producing a biasing pressure on the valve to bias the valve toward the closed configuration.

33. The vaporizer of claim 32 wherein the auxiliary pressure device has an adjustment member to adjustably select the biasing pressure produced by the auxiliary pressure device.

34. The vaporizer of claim 22 wherein the pressure sensor moves the valve toward the open configuration in response to the pressure sensor sensing the difference in the sensed temperature pressure and a pressure of the liquefied petroleum gas supplied by the source of liquefied petroleum gas being one of increasing and decreasing, and moves the valve toward

the closed configuration in response to the pressure sensor sensing the difference in the sensed temperature pressure and a pressure of the liquefied petroleum gas supplied by the source of liquefied gas being the other of increasing and decreasing.

35. A multiple vaporizer system for vaporizing a liquefied gas supplied by a source of liquefied gas, the vaporizer system comprising:

a manifold; and

a plurality of vaporizers, each of the vaporizers including:

(a) a heat exchanger having an inlet structured to accept liquefied gas, a heater to boil and superheat the accepted liquefied gas and thereby produce a gas vapor, and an outlet structured to release the gas vapor to the manifold, and

(b) a capacity control valve having a temperature sensor configured to sense the temperature of the gas vapor produced by the heat exchanger and to produce a sensed temperature pressure in response to the sensed temperature, a pressure sensor configured to sense the difference in the sensed temperature pressure and a pressure of the liquefied gas supplied by the source of liquefied gas, a valve inlet structured to be coupled to and accept the liquefied gas supplied by the source of liquefied gas, a valve outlet connected to the heat exchanger inlet, and a valve regulating the flow of liquefied gas between the valve inlet and the valve outlet, the valve being movable toward a closed configuration to reduce the flow of liquefied gas between the valve inlet and the valve outlet and toward an open configuration to increase the flow of liquefied gas between the valve inlet and the valve outlet, the valve being moved toward the closed and open configurations in response to the pressure sensor sensing the difference in the sensed temperature pressure and the pressure of the liquefied gas supplied by the source of liquefied gas.

36. The multiple vaporizer system of claim 35, wherein the valve of each of the vaporizers is movable fully to the closed configuration and to the open configuration.

37. The vaporizer of claim 35 wherein the temperature sensor of each of the vaporizers is thermally coupled to the heat exchanger outlet of the vaporizer.

38. The vaporizer of claim 35 wherein the capacity control valve of each of the vaporizers further includes an auxiliary pressure device producing a biasing pressure on the valve of the vaporizer to bias the valve toward the closed configuration.

39. The vaporizer of claim 38 wherein the auxiliary pressure device of each of the vaporizers has an adjustment member to adjustably select the biasing pressure produced by the auxiliary pressure device of the vaporizer.

40. The vaporizer of claim 35 wherein the pressure sensor of each of the vaporizers moves the valve of the vaporizer toward the open configuration in response to the pressure sensor of the vaporizer sensing the difference in the sensed temperature pressure and a pressure of the liquefied gas supplied by the source of liquefied gas being one of increasing and decreasing, and moves the valve of the vaporizer toward the closed configuration in response to the pressure sensor of the vaporizer sensing the difference in the sensed temperature pressure and a pressure of the liquefied gas supplied by the source of liquefied gas being the other of increasing and decreasing.

41. A method for vaporizing a liquefied gas supplied by a source of liquefied gas, comprising:

introducing a quantity of liquefied gas into a heat exchanger at a flow rate;

vaporizing the liquefied gas in the heat exchanger to produce a gas vapor;

sensing the temperature of the gas vapor produced by the heat exchanger;

generating a sensed temperature pressure in response to the sensed temperature;

sensing a difference in the sensed temperature pressure and a pressure of the liquefied gas supplied by the source of liquefied gas; and

adjusting the flow rate of the liquefied gas into the heat exchanger in response to sensing the difference in the sensed temperature pressure and the pressure of the liquefied gas supplied by the source of liquefied gas.

42. The method of claim 41, wherein adjusting the flow rate of the liquefied gas into the heat exchanger includes operating a valve controlling the flow rate of the liquefied gas into the heat exchanger.

43. A vaporizer for vaporizing a liquefied gas supplied by a source of liquefied gas and useable with a heat source, the vaporizer comprising:

a heat exchanger having an inlet structured to accept liquefied gas, a heat exchanger portion to boil and superheat the accepted liquefied gas to produce a gas vapor using the heat supplied by the heat source, and an outlet structured to release the gas vapor;

a temperature sensor arranged to sense the temperature of the gas vapor produced by the heat exchanger and produce a sensed temperature pressure in response to the sensed temperature;

a pressure sensor arranged to sense the difference in the sensed temperature pressure and a pressure of the liquefied gas supplied by the source of liquefied gas; and

a flow regulator valve arranged to regulate the flow of liquefied gas from the source of liquefied gas to the heat exchanger inlet in response to the pressure sensor sensing the difference in the sensed temperature pressure and the pressure of the liquefied gas supplied by the source of liquefied gas.

44. The vaporizer of claim 43, wherein the temperature sensor is arranged to sense the temperature of the gas vapor at the heat exchanger outlet.

45. The vaporizer of claim 43 further including a biasing member producing a biasing force to bias the flow regulator to reduce the flow of liquefied gas to the heat exchanger inlet.

46. The vaporizer of claim 45 further including an adjustment member arranged to selectively adjust the biasing force produced by the biasing member.

47. The vaporizer of claim 43 wherein the flow regulator is arranged to increase the flow of liquefied gas to the heat exchanger inlet in response to the pressure sensor sensing the difference in the sensed temperature pressure and the pressure of the liquefied gas supplied by the source of liquefied gas being one of increasing and decreasing, and decrease the flow of liquefied gas to the heat exchanger inlet in response to the pressure sensor sensing the difference in the sensed temperature pressure and the pressure of the liquefied gas supplied by the source of liquefied gas being the other of increasing and decreasing.

48. The vaporizer of claim 43 wherein the flow regulator is a valve.

49. The vaporizer of claim 48 wherein the flow regulator is a control valve having a valve body with a liquefied gas inlet chamber and a liquefied gas outlet chamber, with a valve inlet in fluid communication with the liquefied gas inlet chamber and structured to be coupled to and accept the liquefied gas supplied by the source of liquefied gas, and a valve outlet in fluid communication with the liquefied gas outlet chamber and connected to the heat exchanger inlet, and having a valve positioned between the liquefied gas inlet chamber and the liquefied gas outlet chamber, the valve being movable toward a closed configuration to reduce the flow of liquefied gas from the liquefied gas inlet chamber to the liquefied gas outlet chamber and toward an open configuration to increase the flow of liquefied gas from the liquefied gas inlet chamber to the liquefied gas outlet chamber, the valve being moved toward the closed and open configurations in response to the pressure sensor sensing the difference in the sensed temperature pressure and the pressure of the liquefied gas supplied by the source of liquefied gas.

50. The vaporizer of claim 43 wherein the flow regulator includes a first valve having a valve body with a liquefied gas inlet chamber and a liquefied gas outlet chamber, a valve inlet in fluid communication with the liquefied gas inlet chamber and structured to be coupled to and accept the liquefied gas supplied by the source of liquefied gas, a valve outlet in fluid communication with the liquefied gas outlet chamber, and a valve positioned between the liquefied gas inlet chamber and the liquefied gas outlet chamber, the valve being movable toward a closed configuration to reduce the flow of liquefied gas from the liquefied gas inlet chamber to the liquefied gas outlet chamber and toward an open configuration to increase the flow of liquefied gas from the liquefied gas inlet chamber to the liquefied gas outlet chamber, the valve being moved toward the closed and open configurations in response to the pressure sensor sensing the difference in the sensed temperature pressure and the pressure of the liquefied gas supplied by the source of liquefied gas; and a second valve having a valve body with an expansion chamber, a liquefied gas inlet chamber and a liquefied gas outlet chamber, the expansion chamber being connected to the valve outlet of the first valve, a valve inlet in fluid communication with the liquefied gas inlet chamber and structured to be coupled to and accept the liquefied gas supplied by the source of liquefied gas, a valve outlet in fluid communication with the liquefied gas outlet chamber and connected to the heat exchanger inlet, and a valve positioned between the liquefied gas inlet chamber and the liquefied gas outlet chamber, the valve being movable toward a closed configuration to reduce the flow of liquefied gas from the liquefied gas inlet chamber to the liquefied gas outlet chamber and toward an open configuration to increase the flow of liquefied gas from the liquefied gas inlet chamber to the liquefied gas outlet chamber, the valve being moved toward the closed and open configurations in response to changes in the pressure in the expansion chamber, with the pressure in the expansion chamber being dependent on the pressure in the valve outlet of the first valve.

51. The vaporizer of claim 50 further including a pressure regulator, and wherein the valve outlet of the first valve is connected to the expansion chamber of the second valve through the pressure regulator.

52. The vaporizer of claim 51 wherein the pressure regulator includes an inlet chamber, an outlet chamber and a sensing conduit, the pressure regulator inlet chamber being connected to the valve outlet of the first valve, the pressure regulator outlet chamber being connected to the expansion chamber of the second valve, and the pressure regulator sensing conduit being connected to the heat exchanger inlet.

53. The vaporizer of claim 43 wherein the flow regulator includes a first valve having a valve body with a liquefied gas inlet chamber and a liquefied gas outlet chamber, a valve inlet in fluid communication with the liquefied gas inlet chamber and structured to be coupled to and accept the liquefied gas supplied by the source of liquefied gas, a valve outlet in fluid communication with the liquefied gas outlet chamber, and a valve positioned between the liquefied gas inlet chamber and the liquefied gas outlet chamber, the valve being movable toward a closed configuration to reduce the flow of liquefied gas from the liquefied gas inlet chamber to the liquefied gas outlet chamber and toward an open configuration to increase the flow of liquefied gas from the liquefied gas inlet chamber to the liquefied gas outlet chamber, the valve being moved toward the closed and open configurations in response to the pressure sensor sensing the difference in the sensed temperature pressure and the pressure of the liquefied gas supplied by the source of liquefied gas; and a second valve having a valve body with a liquefied gas inlet chamber and a liquefied gas outlet chamber, a valve inlet in fluid communication with the liquefied gas inlet chamber and structured to be coupled to and accept the liquefied gas supplied by the source of liquefied gas, a valve outlet in fluid communication with the liquefied gas outlet chamber and connected to the heat exchanger inlet, and a valve positioned between the liquefied gas inlet chamber and the liquefied gas outlet chamber, the valve being movable toward a closed configuration to reduce the flow of liquefied gas from the liquefied gas inlet chamber to the liquefied gas outlet chamber and toward an open configuration to increase the flow of liquefied gas from the liquefied gas inlet chamber to the liquefied gas outlet chamber, the valve outlet of the first valve being connected to the second valve in a manner to control operation of the valve of the second valve with the valve of the second valve being moved toward the closed

and open configurations in response to changes in the pressure in the valve outlet of the first valve.

54. A vaporizer for vaporizing a liquefied gas supplied by a source of liquefied gas, the vaporizer comprising:

a heat exchanger having an inlet structured to accept liquefied gas, a plurality of positive temperature coefficient heater elements operable to supply heat to boil and superheat the accepted liquefied gas to produce a gas vapor, and an outlet structured to release the gas vapor;

a temperature sensor arranged to sense the temperature of the gas vapor produced by the heat exchanger and produce a sensed temperature pressure in response to the sensed temperature;

a pressure sensor arranged to sense the difference in the sensed temperature pressure and a pressure of the liquefied gas supplied by the source of liquefied gas; and

a flow regulator valve arranged to regulate the flow of liquefied gas from the source of liquefied gas to the heat exchanger inlet in response to the pressure sensor sensing the difference in the sensed temperature pressure and the pressure of the liquefied gas supplied by the source of liquefied gas.

55. The vaporizer of claim 54, wherein the heat exchanger includes a mass of thermally conductive material with a tube embedded therein to transfer heat from the thermally conductive material to the contents of the tube, the tube having an inlet comprising the heat exchanger inlet and an outlet comprising the heat exchanger outlet.

56. The vaporizer of claim 55, wherein the mass of thermally conductive material is formed into a block with a planar surface portion and the heater elements are each flat with a substantially planar surface, the planar surfaces of the heater elements being in coplanar parallel arrangement with the planar surface portion of the block.

57. The vaporizer of claim 54, wherein the heat exchanger includes a first block of thermally conductive material with a first tube embedded therein to transfer heat from

the thermally conductive material of the first block to the contents of the first tube, the first block having a surface portion, the first tube having an inlet portion comprising the heat exchanger inlet and an outlet portion, and a second block of thermally conductive material with a second tube embedded therein to transfer heat from the thermally conductive material of the second block to the contents of the second tube, the second block having a surface portion, the second tube having an inlet portion connected to the outlet portion of the first block and an outlet portion comprising the heat exchanger outlet, the first and second blocks being arranged with the surface portions thereof facing each other, and the heater elements each being formed with first and second opposed surfaces and being positioned between the first and second blocks with the first surfaces of the heater elements in thermal contact with the surface portion of the first block and with the second surfaces of the heater elements in thermal contact with the surface portion of the second block.

58. The vaporizer of claim 57, further including at least one member holding the first and second blocks tightly together with the heater elements positioned therebetween clamped tightly between the surface portions of the first and second blocks.

59. A vaporizer for vaporizing a liquefied gas supplied by a source of liquefied gas, the vaporizer comprising:

a heat exchanger having an inlet structured to accept liquefied gas, a heater to boil and superheat the accepted liquefied gas and thereby produce a gas vapor, and an outlet structured to release the gas vapor; and

a capacity control having:

first means for sensing the temperature of the gas vapor produced by the heat exchanger and producing a sensed temperature pressure in response to the sensed temperature,

second means for sensing the difference in the sensed temperature pressure and a pressure of the liquefied gas supplied by the source of liquefied gas, and

third means for regulating the flow of liquefied gas from the source of liquefied gas to the heat exchanger inlet in response to the second means sensing the difference in the sensed temperature pressure and the pressure of the liquefied gas supplied by the source of liquefied gas.

60. The vaporizer of claim 59, wherein the first means senses the temperature of the released gas vapor at the heat exchanger outlet.

61. The vaporizer of claim 59 wherein the capacity control further includes fourth means for producing a biasing pressure to bias the third means to reduce the flow of liquefied gas to the heat exchanger inlet.

62. The vaporizer of claim 61 wherein the capacity control further includes fifth means for selectively adjusting the biasing pressure produced by the fourth means.

63. The vaporizer of claim 59 wherein the third means increases the flow of liquefied gas to the heat exchanger inlet in response to the second means sensing the difference in the sensed temperature pressure and the pressure of the liquefied gas supplied by the source of liquefied gas being one of increasing and decreasing, and decreases the flow of liquefied gas to the heat exchanger inlet in response to the second means sensing the difference in the sensed temperature pressure and the pressure of the liquefied gas supplied by the source of liquefied gas being the other of increasing and decreasing.

64. A vaporizer for vaporizing a liquefied gas supplied by a source of liquefied gas, the vaporizer comprising:

first means for superheating the liquefied gas supplied by the source of liquefied gas to produce a gas vapor;

second means for sensing the temperature of the produced gas vapor and producing a sensed temperature pressure in response to the sensed temperature,

third means for sensing the difference in the sensed temperature pressure and a pressure of the liquefied gas supplied by the source of liquefied gas, and

fourth means for regulating the flow of liquefied gas from the source of liquefied gas to the first means in response to the third means sensing the difference in the sensed temperature pressure and the pressure of the liquefied gas supplied by the source of liquefied gas.

65. The vaporizer of claim 64, wherein the first means includes means for outputting releasing the produced gas vapor and the second means senses the temperature of the produced gas vapor at the outputting means.

66. The vaporizer of claim 64 further including fifth means for producing a biasing pressure to bias the fourth means to reduce the flow of liquefied gas to the first means.

67. The vaporizer of claim 66 wherein further including sixth means for selectively adjusting the biasing pressure produced by the fifth means.

68. The vaporizer of claim 64 wherein the fourth means increases the flow of liquefied gas to the first means in response to the third means sensing the difference in the sensed temperature pressure and the pressure of the liquefied gas supplied by the source of liquefied gas being one of increasing and decreasing, and decreases the flow of liquefied gas to the first means in response to the third means sensing the difference in the sensed temperature pressure and the pressure of the liquefied gas supplied by the source of liquefied gas being the other of increasing and decreasing.